

A1
connected by the stabilizing section to the firing space;
spinnerts which receive molten glass from the feeder; and
mechanisms which pull fibers from the spinnerets.

Please add new claims 19 and 20 which read as follows:

b33
19.

An apparatus for producing basalt fibers, comprising of:

means for preheating basalt;

means for charging the preheated basalt into a melting furnace;

means for heating the basalt in said furnace to form a glass mass;

means for stabilizing glass mass in a stabilizing section of the melting furnace

until it reaches a fiber manufacturing temperature;

feeder means;

means for introducing the stabilized glass mass into said feeder means;

means for further stabilizing the glass mass in said feeder means to obtain a glass

mass having the composition

$$\frac{Al_2O_3 + SiO_2}{CaO + MgO} \geq 3$$

$$\frac{FeO}{Fe_2O_3} \geq 0.5$$

$$\frac{2Al_2O_3 + SiO_2}{2Fe_2O_3 + FeO + CaO + MgO + K_2O + Na_2O} > 0.5$$

means for forming fibers by pulling the further stabilized glass mass from

spinneret means which receive glass from the said feeder means.

A2
20. The apparatus of claim 8 wherein said basalt receiver is a basalt weigher.